

Appendix B

Radionuclide and Chemical Nomenclature

Nomenclature and Half-Life for Radionuclides					
Radionuclide	Symbol	Half-life ^{a,b}	Radionuclide	Symbol	Half-life ^{a,b}
Actinium-228	Ac-228	6.15 h	Mercury-203	Hg-203	46.61 d
Americium-241	Am-241	432.7 y	Neptunium-237	Np-237	2.14E6 y
Americium-243	Am-243	7370 y	Neptunium-239	Np-239	2.355 d
Antimony-124	Sb-124	60.2 d	Nickel-59	Ni-59	7.6E4 y
Antimony-125	Sb-125	2.758 y	Nickel-63	Ni-63	100 y
Argon-39	Ar-39	269 y	Niobium-94	Nb-94	2.0E4 y
Barium-133	Ba-133	10.7 y	Niobium-95	Nb-95	34.97 d
Beryllium-7	Be-7	53.28 d	Plutonium-238	Pu-238	87.7 y
Bismuth-212	Bi-212	2.14 m	Plutonium-239	Pu-239	2.41E4 y
Bismuth-214	Bi-214	19.9 m	Plutonium-240	Pu-240	6560 y
Carbon-14	C-14	5714 y	Plutonium-241	Pu-241	14.4 y
Cerium-141	Ce-141	32.5 d	Plutonium-242	Pu-242	3.75E5 y
Cerium-144	Ce-144	284.6 d	Potassium-40	K-40	1.27E9 y
Cesium-134	Cs-134	2.065 y	Praseodymium-144	Pr-144	17.28 m
Cesium-137	Cs-137	30.07 y	Praseodymium-144m	Pr-144m	7.2 m
Chromium-51	Cr-51	27.702 d	Promethium-147	Pm-147	2.6234 y
Cobalt-57	Co-57	271.8 d	Protactinium-231	Pa-231	3.28E4 y
Cobalt-58	Co-58	70.88 d	Protactinium-233	Pa-233	27.0 d
Cobalt-60	Co-60	5.271 y	Protactinium-234	Pa-234	6.69 h
Curium-242	Cm-242	162.8 d	Radium-226	Ra-226	1599 y
Curium-244	Cm-244	18.1 y	Radium-228	Ra-228	5.76 y
Curium-245	Cm-245	8.50E3 y	Ruthenium-103	Ru-103	39.27 d
Curium-246	Cm-246	4.76E3 y	Ruthenium-106	Ru-106	1.020 y
Europium-152	Eu-152	13.54 y	Selenium-75	Se-75	119.78 d
Europium-154	Eu-154	8.593 y	Selenium-79	Se-79	6.5E5 y
Europium-155	Eu-155	4.75 y	Sodium-22	Na-22	2.604 y
Iodine-129	I-129	1.57E7 y	Strontium-89	Sr-89	50.52 d
Iodine-131	I-131	8.0207 d	Strontium-90	Sr-90	28.78 y
Iodine-133	I-133	20.3 h	Technetium-99	Tc-99	2.13E5 y
Krypton-85	Kr-85	10.76 y	Thallium-208	Tl-208	3.053 m
Lead-212	Pb-212	10.64 h	Thorium-228	Th-228	1.913 y
Lead-214	Pb-214	27 m	Thorium-230	Th-230	7.54E4 y
Manganese-54	Mn-54	312.1 d	Thorium-232	Th-232	1.40E10 y

a m=minute; h = hour; d = day; y = year

b Reference: Chart of the Nuclides, 15th edition, revised 1996, General Electric Company

Nomenclature and Half-Life for Radionuclides, Continued					
Radionuclide	Symbol	Half-life ^{a,b}	Radionuclide	Symbol	Half-life ^{a,b}
Thorium-234	Th-234	24.10 d	Uranium-235	U-235	7.04E8 y
Tin-113	Sn-113	115.1 d	Uranium-236	U-236	2.342E7 y
Tin-126	Sn-126	2.5E5 y	Uranium-238	U-238	4.47E9 y
Tritium (Hydrogen-3)	H-3	12.32 y	Xenon-135	Xe-135	9.10 h
Uranium-232	U-232	69.8 y	Zinc-65	Zn-65	243.8 d
Uranium-233	U-233	1.592E5 y	Zirconium-85	Zr-85	7.7 m
Uranium-234	U-234	2.46E5 y	Zirconium-95	Zr-95	64.02 d

a m=minute; h = hour; d = day; y = year

b Reference: Chart of the Nuclides, 15th edition, revised 1996, General Electric Company

Nomenclature for Elements and Chemical Constituent Analyses			
Constituent	Symbol	Constituent	Symbol
<i>Note: Some of the symbols listed in this table came from various databases used to format the data tables in this report and are included here to assist the reader in understanding the tables.</i>			
Aluminum	Al (or AL)	Nitrite, Nitrate	NO ₂ , NO ₃ (or NO ₂ , NO ₃ or NO ₂ /NO ₃)
Ammonia	NH ₃		
Ammonia as Nitrogen	NH ₃ -N (or AN)	pH	pH (or PH)
Antimony	Sb (or SB)	Phenol	PHE
Arsenic	As (or AS)	Phosphorus	P
Barium	Ba (or BA)	Phosphate	PO ₄ (or PO ₄ -P or PO ₄ -P)
Biological Oxygen Demand	BOD		
Beryllium	Be	Polychlorinated Biphenyl	PCB
Boron	B	Potassium	K
Bromide	B-	Selenium	Se (or SE)
Cadmium	Cd (or CD)	Silver	Ag (or AG)
Chemical Oxygen Demand	COD	Sulfate	SO ₄ (or SO ₄)
Chlorine	Cl (or CHL)	Tetrachloroethene	PERCL
Chromium	Cr (or CR)	Tetrachloroethylene (Perchloroethylene)	PERCL
Cobalt	Co	Trichloroethene	TRICL
Copper	Cu (or CU)	Trichloroethylene	TRICL
Cyanide	CN	Tin	SN
Dissolved Oxygen	DO	Total Dissolved Solids	TDS
Iron	Fe (or FE)	Total Kjeldahl Nitrogen	TKN
Lead	Pb (or PB)	Total Organic Carbon	TOC
Magnesium	Mg (or MG)	Total Suspended Particulate Matter	TSP
Manganese	Mn (or MN)	Total Suspended Solids	TSS
Mercury	Hg (or HG)	Total Volatile Solids	TVS
Molybdenum	Mo	Uranium	U
Nickel	Ni (or NI)	Vinyl Chloride	VC
Nitrate	NO ₃	Zinc	Zn (or ZN)
Nitrate as Nitrogen	NO ₃ -N		
Nitrite as Nitrogen	NO ₂ -N		